Hardware

Off-line

IBM won't say how the group coded recording technique works on its recently announced 6250 bpi tape drives, but according to a spokesman at the Potter Instrument Company, "It's logical to assume that an essential part of the approach" borrows from a basic patent awarded in 1965 to then-company-president John T. Potter (and associates). Potter, which is coming out with its own line of 6250 drives, says that relatively recent advances in solid state technology have made the technique economically feasible to use. IBM is currently the only company licensed by Potter to use its gcr technique, but other "responsible" manufacturers are offered access to it.

One of the more interesting computer architectures seen to date has been assembled by a Carnegie-Mellon Univ. (Pittsburgh) professor and a team of students. Called the Multi-Mini-Processor, it consists of 16 Digital Equipment PDP-11 minicomputers, each with its own memory, tied to a switch that allows each mini to access any other mini's memory. The minis can be set up to work on various portions of one job, operate in small groups, or be set up to work independently on 16 separate jobs. One of the first tasks the MMP will face is the real-time speech understanding problem.

Two companies have recently developed some interesting modifications for IBM products. Itel Corp., San Francisco, teaming with Advanced Memory Systems, is offering a 370/155 processor speed up, involving attachment of AMS-supplied semiconductor memory and removal of "tread-water" cpu logic originally built into 155 cpu so that it could operate with relatively slow core storage. The modified 155's performance is said to be on a par with the 370/158. Similarly, Greyhound Computer Corp. has taken a "stock" 360/30, equipped it with up to one megabyte of core, additional disc capacity, and a 370-compatible operating system from The Computer Co. (see p. 107). A 512K version of the Phoenix system is said to approach the performance of a 370/145.

Teletype's Crt Terminal

It has taken the Teletype Corp. a long time to announce its crt terminal, which is understandable considering all the restrictions placed on the company by antitrust laws and consent decrees. The DATASPEED 40 is an exciting product with a number of well-thought-out features, not the least of which are in the area of reliability, and the product will undoubtedly be a successful one.

There are a number of configurations that can be assembled from the following components: a crt display monitor with dimensions of approximately 6 x 12 inches, 128-character ASCII keyboard, a serial printer, and the logic for the 40. When only the serial printer is specified, the 40 is a receive-only printer that operates at up to 120

cps. The printer can be placed alongside the crt screen to provide backup copy, or it is also available integrated with the keyboard (much like the current Teletype models) with the crt screen sitting atop the configuration. The screen displays up to 24 lines of 80 dot-matrix characters, and can be tilted by the operator to adjust it for minimum glare.

The keyboard also contains such controls as character insert and delete, line insert/delete, scroll up/down, printer controls (on-line or off-line), and cursor controls. Every component of the terminal can be isolated and tested to diagnose potential problems, and in the case of the logic for the DATASPEED 40, this diagnostic capability has reached a new industry high. By manipulating toggle switches on the circuit boards contained in the logic cabinet, the 40 displays oscilloscope images on the crt monitor.

The DATASPEED 40 is really not intended as a model 33 teleprinter placement. Rather, it's meant heavy usage on the switched netw through 202C, 202D, or 202R d sets, basically conforming to AN X3.28 subcategory 2.1 (two-way al nate switched point-to-point) conv tions, but an option is available t allows the terminal to operate conv sationally. The first units of the fam will go into AT&T installations, w availability for the rest of us no earl than the first quarter of next ye Exact pricing and rental rates have n been set, but it's estimated that t receive-only model will go for betwe $105 and $120/month ($2300-$30 on purchase), the keyboard and d play for $110-$125 ($2500 to $35 when purchased), and the combi tion of the two for $175-$195 ($380 $4800.) TELETYPE CORP., Skokie, I

FOR DATA CIRCLE 341 ON READER CARD

Calculator

If you don't need trigonometric fun tions, logarithm capability, and batter powered operation in a shirt pock size container, the Texas Instrumen SR-20 calculator might be the mo competitive product of this type intr duced since the Hewlett-Packard 35 last year. The SR-20 has all the rest the 35's capabilities (except four work ing registers), including a pi key, eps lon key, change sign key, reciproca and square root, and even has son things that the 35 didn't, such as factorial key that makes the SR-2 think for approximately 1.5 seconds and an integer key for displaying an number in integer form. Like the H-3 35, the 20 handles magnitudes of ±99 and calculates answers to 13 signifi cant digits. It weighs less than tw pounds and measures only 9 x 6½ 2½ inches.

TI is currently test marketing the SR 20 in selected portions of the country because they don't want to get flooded with orders for a product that won't be available in quantity until later this year. Their reasoning seems good, as the SR-20 is priced at only $179.95 and we've seen calculators only capable of four function operations priced higher than that. TEXAS INSTRUMENTS, INC., Dallas, Texas.

FOR DATA CIRCLE 342 ON READER CARD

Univac Commo Controller

Here is an alternative communication terminal module controller (CTMC) supplied on Univac 1100 series computers that is based on this manufacturer's Omnus-1 16-bit minicomputer.